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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/694,978	10/27/2003	Jacqueline C. Timans	DX0904KB1	4528

28008 7590 09/12/2006

DNAX RESEARCH INC.  
LEGAL DEPARTMENT  
901 CALIFORNIA AVENUE  
PALO ALTO, CA 94304

EXAMINER
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MERTZ, PREMA MARIA

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/694,978

Applicant(s)

TIMANS, JACQUELINE C.

Examiner

Prema M. Mertz

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 35-53 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 37-38, 40, 42, 44, 46, 48, 50, 52-53 is/are allowed.
- 6) ☒ Claim(s) 35, 39, 41, 43, 45, 47, 49 and 51 is/are rejected.
- 7) ☒ Claim(s) 36 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/1/2006 has been entered.
2. Receipt of applicant's arguments and amendments filed on 8/1/2006 is acknowledged.
3. Applicant's arguments filed on 8/1/2006 have been fully considered and were non-persuasive. The issues remaining are stated below.
4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

***Claim rejections-35 USC § 102(e)***

5. Claims 35, 39, 41, 43, 45 are rejected under 35 U.S.C. 102(e) as being anticipated by the Yang Pan (US Patent No. 6,117,654) as evidenced by Bost et al. (1988).

The reference discloses the cloning and expression of Tango-77 protein. The reference further discloses monoclonal, polyclonal, humanized, labeled antibodies and a method of making the antibodies to the Tango-77 protein (column 18, lines 35-58; column 19, lines 14-42). The claims are anticipated because the Tango-77 polypeptide sequence of the reference shares a sequence of over 50 amino acids which are 100% identical to the claimed amino acid sequence of SEQ ID NO:2 (see Sequence Comparison A, attached), thus an antibody to this region of Tango-77 would bind to the polypeptide of SEQ ID NO:2.

Bost et al teach that that an antibody “cross-reacts”, i.e. binds to more than one protein sequence, which means that an antibody “specifically binds” to both proteins. Bost et al describe antibodies, which “cross-react” with IL-2 and HIV envelope protein, and establish that the binding of the antibody to each protein is due to the presence of a homologous sequence in each protein in which 4-6 residues were identical (see entire document, especially the Abstract and Discussion). Therefore, Bost et al discloses that 4-6 amino acids are sufficient to elicit an antibody response and are sufficient for the binding of an antibody to a protein, which has 4-6 amino acids identical to the protein to which the antibody was raised.

Therefore, the antibody of the Yang Pan reference as evidenced by Bost et al. anticipates instant claims 35, 39, 41, 43, 45.

Applicants argue that the sequence “SLILLGV” (amino acids 107-113 of SEQ ID NO:2) of the instant invention is two amino acids longer than the “ILLGV” amino acids in the reference because amino acids “SL” are not present in the TANGO-77 protein and therefore claim 35 is not anticipated by Yang Pan. However, contrary to Applicants arguments, in the instant rejection, the Bost et al reference has been cited for the proposition that 4-6 amino acids identical in antigens are sufficient for antibodies to cross-react with both antigens. Therefore, claim 35 is anticipated by Yang Pan as evidenced by Bost et al.

***Claim Rejections - 35 USC § 103***

6. Claims 47, 49 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang Pan (U.S. Patent No. 6,117,654) as evidenced by Bost et al. (1988) in view of the Stratagene catalog (1988, page 39).

The teachings of Yang Pan and Bost et al have been set forth above in paragraph 5. However, these references do not teach the use of a kit. The Stratagene catalog does teach a motivation to combine reagents of use into a kit (page 39, column 1).

It would have been *prima facie* obvious to one having ordinary skill in the art at the time the invention was made to combine the antibodies as taught by Pan into a kit as taught by Stratagene since the Stratagene catalog teaches a motivation for combining reagents of use in any assay into a kit. It states that "Each kit provides two services: 1) a variety of different reagents have been assembled and premixed specifically for a defined set of experiments. Thus one need not purchase gram quantities of different reagents, each of which is needed in only microgram amounts, when beginning a series of experiments. When one considers all of the unused chemicals that typically accumulate in weighing rooms, desiccators, and freezers, one quickly realizes that it is actually far more expensive for a small number of users to prepare most buffer solutions from the basic reagents. Stratagene provides only the quantities you will actually need, premixed and tested. In actuality, the kit format saves money and resources for everyone by dramatically reducing waste. 2) The other service provided in a kit is quality control" (page 39, column 1).

### ***Conclusion***

Claims 37-38, 40, 42, 44, 46, 48, 50, 52-53 are allowed.

Claim 36 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent.

Claims 35, 39, 41, 43, 45, 47, 49 and 51 are rejected.

### ***Advisory Information***


Art Unit: 1646

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prema Mertz whose telephone number is (571) 272-0876. The examiner can normally be reached on Monday-Friday from 7:00AM to 3:30PM (Eastern time).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Nickol, can be reached on (571) 272-0835.

Official papers filed by fax should be directed to (571) 273-8300. Faxed draft or informal communications with the examiner should be directed to (571) 273-0876.

Information regarding the status of an application may be obtained from the Patent application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Prema Mertz Ph.D., J.D.

Primary Examiner

Art Unit 1646

September 5, 2006